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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,552	07/17/2003	Bobby Hu	2186-00400 DVF	1339
23505	7590	03/08/2005	EXAMINER	
CONLEY ROSE, P.C. P. O. BOX 3267 HOUSTON, TX 77253-3267			MEISLIN, DEBRA S	
			ART UNIT	PAPER NUMBER
			3723	
DATE MAILED: 03/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,552

Applicant(s)

HU, BOBBY

Examiner

Debra S Meislin

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20,22-44,46-50 and 52-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20,22-44,46-50 and 52-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/21/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Claims 40-41, 45 and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 40, "the hole" lacks antecedent basis.

In claim 41, "the hole" lacks antecedent basis.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7, 15-16, 18-20, 22-25 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (3866492) in view of Ling et al (6230591).

Knoll discloses all of the claimed subject matter except for having a pawl which "pivots" or is rotatable about the gear wheel axis, a pawl that abuts against the first or second wall portions, the pawl teeth forming a substantially concave surface, and a top surface with a hole. Note that Knoll discloses non-continuous pawl teeth.

Ling et al discloses a pawl which "pivots" about the gear wheel axis, a pawl that abuts against the first or second wall portions (see figures 3 and 11), the pawl teeth forming a substantially concave surface, and a top surface with a hole (see figures 12-14). It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl "pivots" about the gear wheel axis to change the direction of

rotation of the ratchet and provide a high torque with a minimum free rotating angle useful in a limited space using a ratcheting action as taught by Ling et al.

It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl abuts against the first or second wall portions to allow for the rotation of the workpiece as taught by Ling et al.

It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl teeth form a substantially concave surface and are continuous to enable engagement of the ratchet wheel to transfer torque to the workpiece as taught by Ling et al.

It would have been obvious to one having ordinary skill in the art to form the device of Knoll with a top surface with a hole to allow for the connection between the elements of the device as taught by Ling et al. See figures 12-14.

In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965) states "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice."); but see Schenck v. Nortron Corp., 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). Consequently, it would have been obvious to one having ordinary skill in the art to form the device of Knoll with a single piece head and handle as such would have been merely a matter of obvious engineering choice as taught by Ling et al.

4. Claims 8-11, 14, 27-44, 46-50, 52, 54-56, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (3866492) in view of Hsieh (DE 299 07 467).

Knoll discloses all of the claimed subject matter except for having a pawl which a pawl that abuts against the first or second wall portions, a reversing plate, a pawl which moves along the outer periphery of the gear wheel or is rotatable about the central axis, a hole in the top surface with a transmission member disposed therein which is coupled to the pawl, and teeth forming a concave surface. With respect to claim 42, Knoll discloses a first plurality of teeth and second plurality of teeth being concave and continuous as broadly claimed. Note that Knoll discloses non-continuous pawl teeth.

Hsieh discloses a pawl which moves along the outer periphery of the gear wheel, a pawl which is rotatable about the central axis, a pawl that abuts against the first or second wall portions (see figures 3 and 11), a reversing plate, a hole in the top surface with a transmission member disposed therein which is coupled to the pawl, and teeth forming a concave surface. It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl moves along the outer periphery the gear wheel or is rotatable about the central axis to change the direction of rotation of the ratchet and provide a ratcheting action as taught by Hsieh.

It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl abuts against the first or second wall portions to allow for the rotation of the workpiece as taught by Hsieh.

It would have been obvious to one having ordinary skill in the art to form the switching member of Knoll as a reversing plate to change the direction of rotation of the ratchet mechanism as taught by Hsieh.

It would have been obvious to one having ordinary skill in the art to form the device of Knoll with a hole in the top surface with a transmission member disposed therein which is coupled to the pawl to allow for the actuation of the pawl as taught by Hsieh.

It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl teeth form a substantially concave surface to enable engagement of the ratchet wheel to transfer torque to the workpiece as taught by Hsieh.

5. Claims 6, 17, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (3866492) in view of Ling et al (6230591) as applied above, in further view of Colvin (4903554).

Colvin discloses a drive column for release or engagement of a socket. It would have been obvious to one having ordinary skill in the art to form the device of Knoll with a drive column to allow for the release or engagement of a socket as taught by Colvin.

6. Claims 12 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (3866492) in view of Hsieh (DE 299 07 467) as applied above, in further view of Colvin (4903554).

Colvin discloses a drive column for release or engagement of a socket. It would have been obvious to one having ordinary skill in the art to form the device of Knoll with a drive column to allow for the release or engagement of a socket as taught by Colvin.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (3866492) in view of Hsieh (DE 299 07 467) and Colvin (4903554) as applied above, in further view of Ling et al (6230591).

Ling et al discloses continuous pawl teeth. It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl teeth are continuous to secure enable engagement of the ratchet wheel as taught by Ling et al.

8. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knoll (3866492) in view of Hsieh (DE 299 07 467) as applied above, in further view of Ling et al (6230591).

Ling et al discloses continuous pawl teeth. It would have been obvious to one having ordinary skill in the art to form the device of Knoll such that the pawl teeth are continuous for secure engagement of the ratchet wheel as taught by Ling et al.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Applicant's arguments filed December 6, 2004 have been fully considered but they are not persuasive.

Applicant's arguments with respect to the claims amended to include a reversing plate have been considered but are moot in view of the new ground(s) of rejection.

Hsieh was applied to the rejection of the claims to disclose a reversing plate as set forth, above.

With respect to claims 59-61, Ling et al or Hsieh were applied to the rejection of the claims to disclose the claimed pivoting of the pawl about the central axis.

The pawl of Ling et al "pivots" about the gear wheel axis during movement between first and second ratcheting positions, in as much as applicant's pawl pivots about the central axis. Figures 9-11 of Ling et al shows the various positions of the pawl as it is being moved between ratcheting positions. This movement extends about the central axis of the gear wheel.

Applicant traverses the examiner's Official Notice that "the use of sliding/pivoting pawls as opposed to strictly pivoting pawls is notoriously old and well known in the art". Though the examiner has withdrawn this statement as being a cumulative teaching, applicant has clearly agreed with the examiner by stating "While applicant recognizes that both sliding and pivoting pawls are known the art...".

In response to applicant's argument that Ling could not be used in the apparatus of Knoll without significant redesign, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).


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The pawl of Hsieh "pivots" about the gear wheel axis during movement between first and second ratcheting positions, in as much as applicant's pawl pivots about the central axis. Note figures 4-5 of Hsieh.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra S Meislin whose telephone number is 571 272-4487. The examiner can normally be reached on M-F, alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Debra S Meislin
Primary Examiner
Art Unit 3723

March 3, 2005